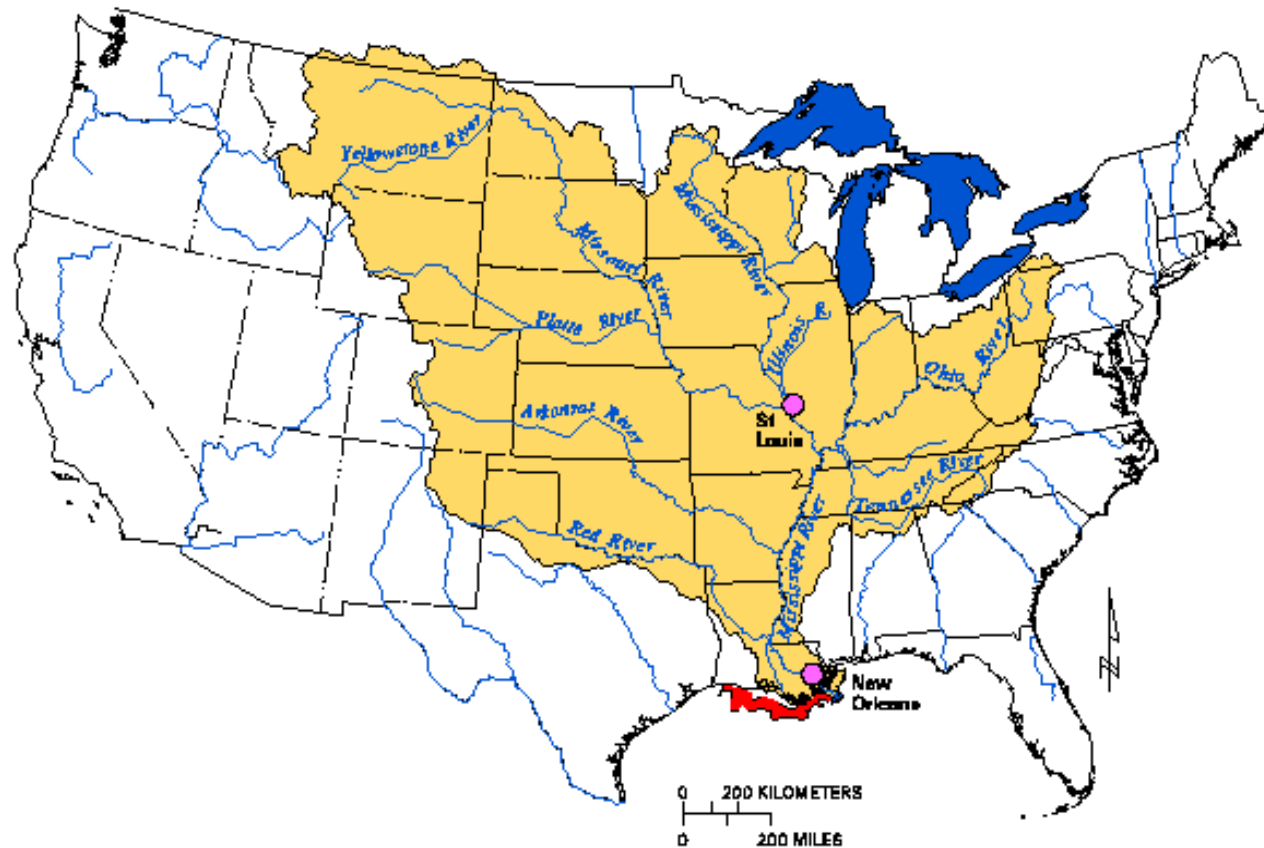
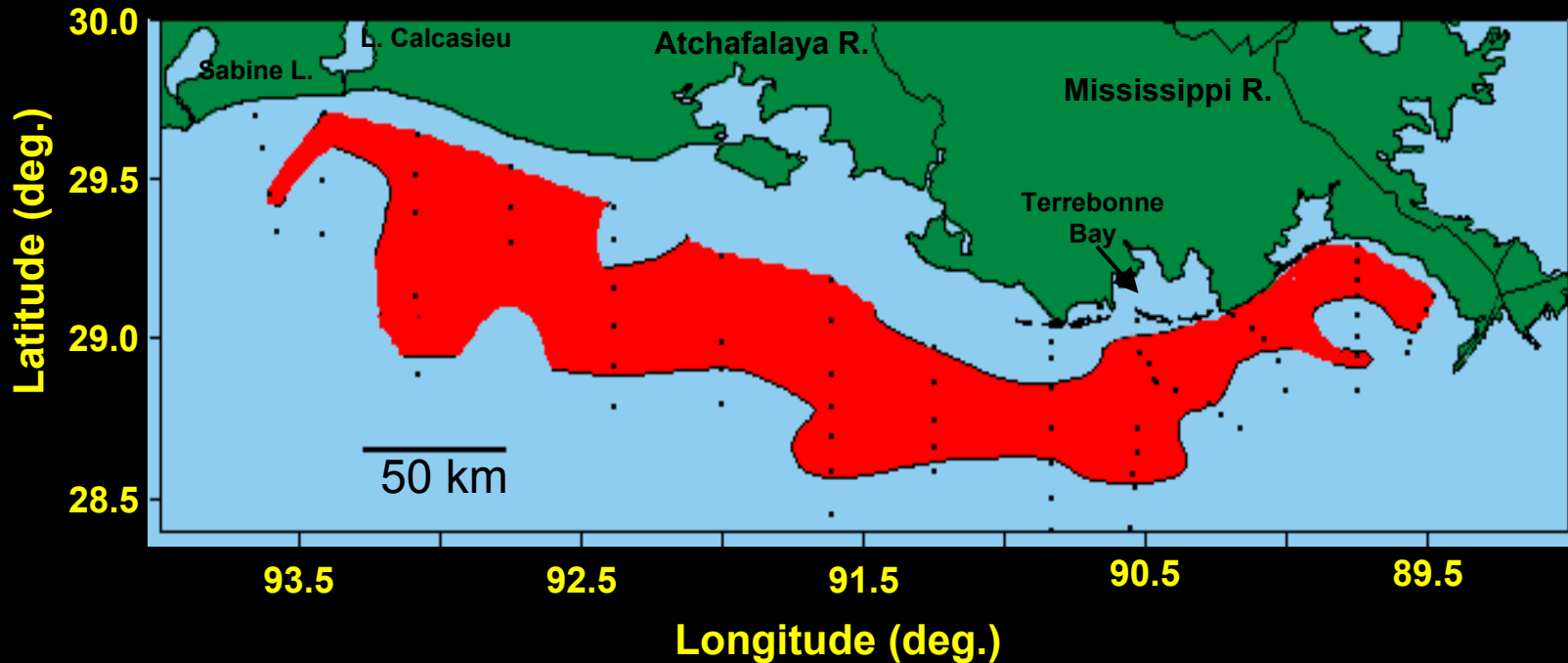


MISSISSIPPI – ATCHAFALAYA RIVER BASIN



July 23-28, 1999, Shelfwide Oxygen Survey

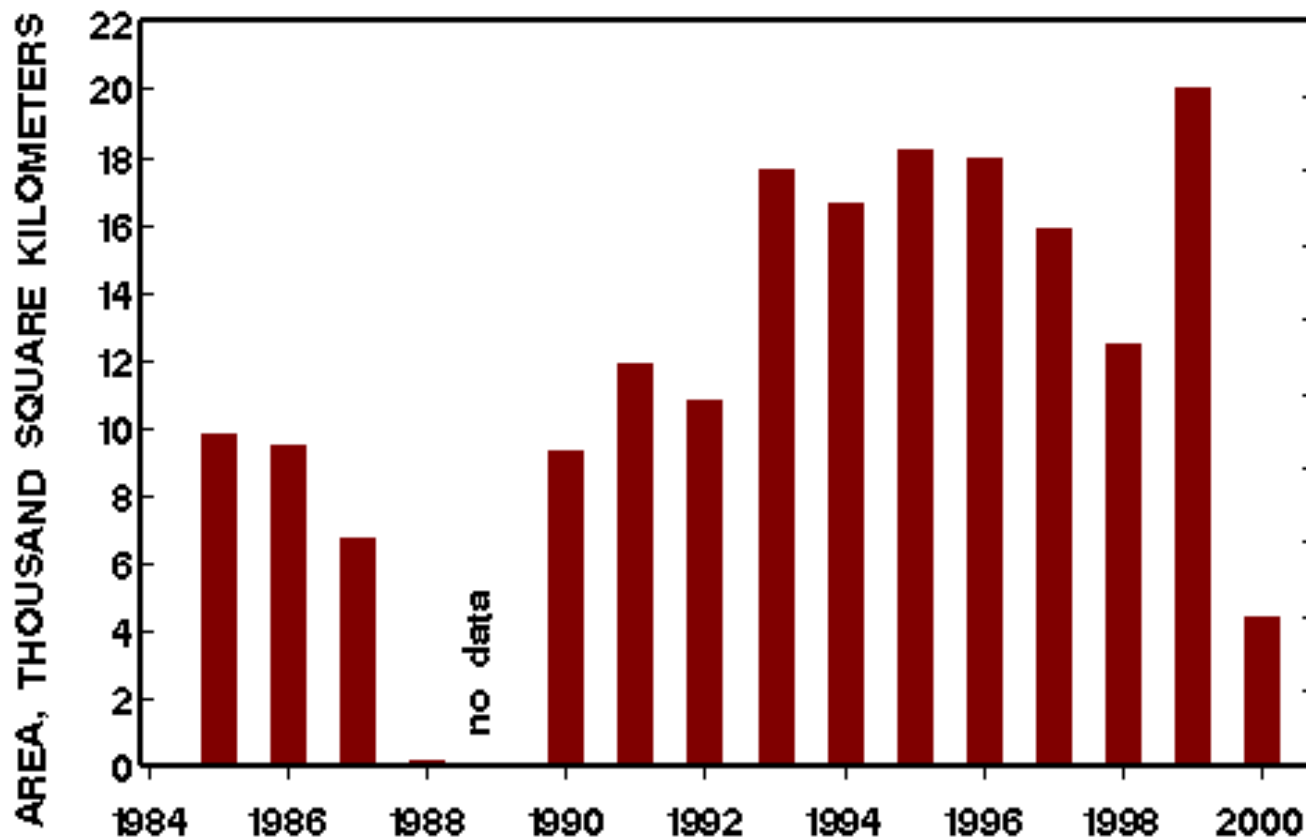


 Bottom Dissolved Oxygen Less than 2.0 mg/L

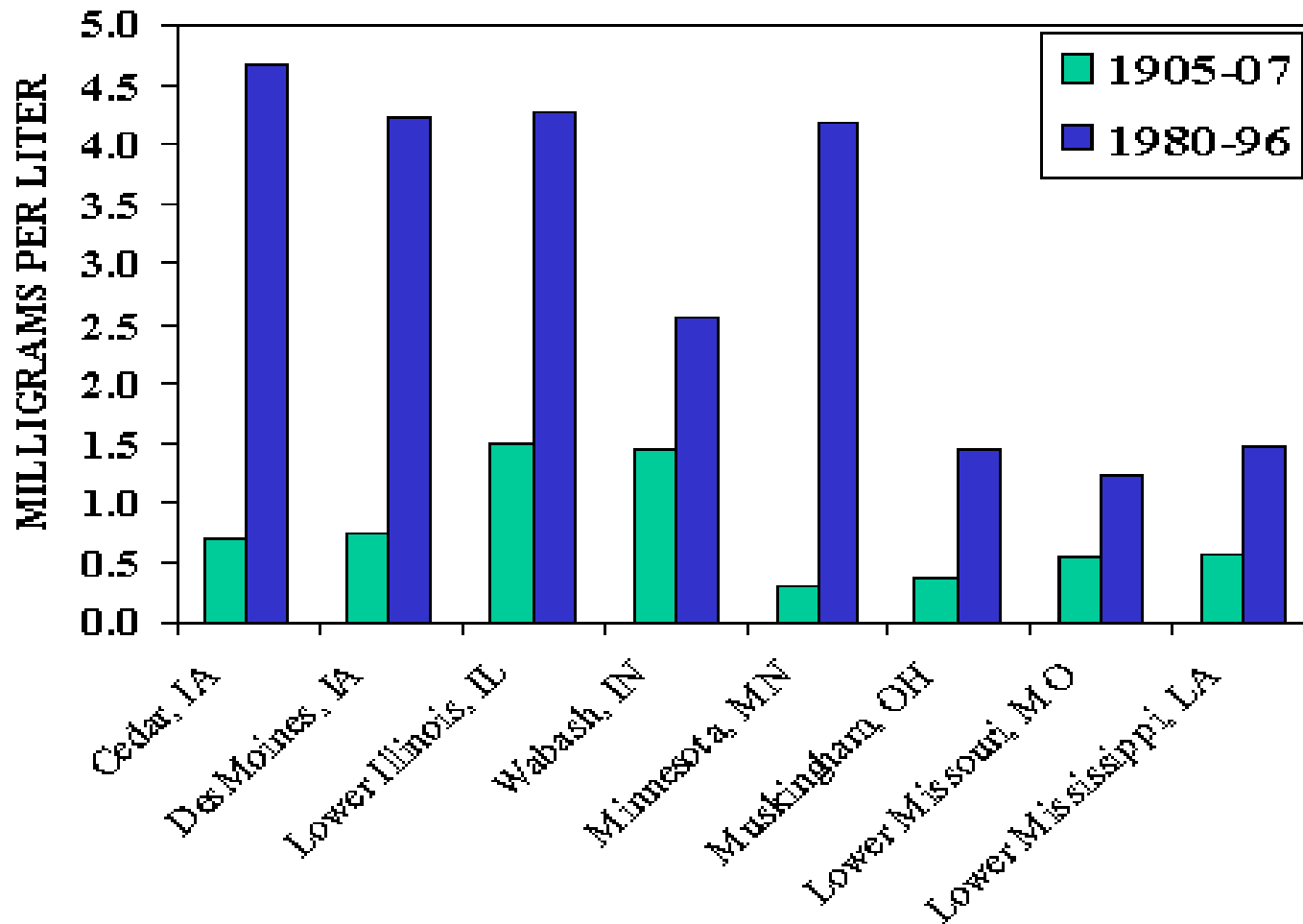
(Rabalais, Turner & Wiseman)

Area of Hypoxic Zone, 1985-2000

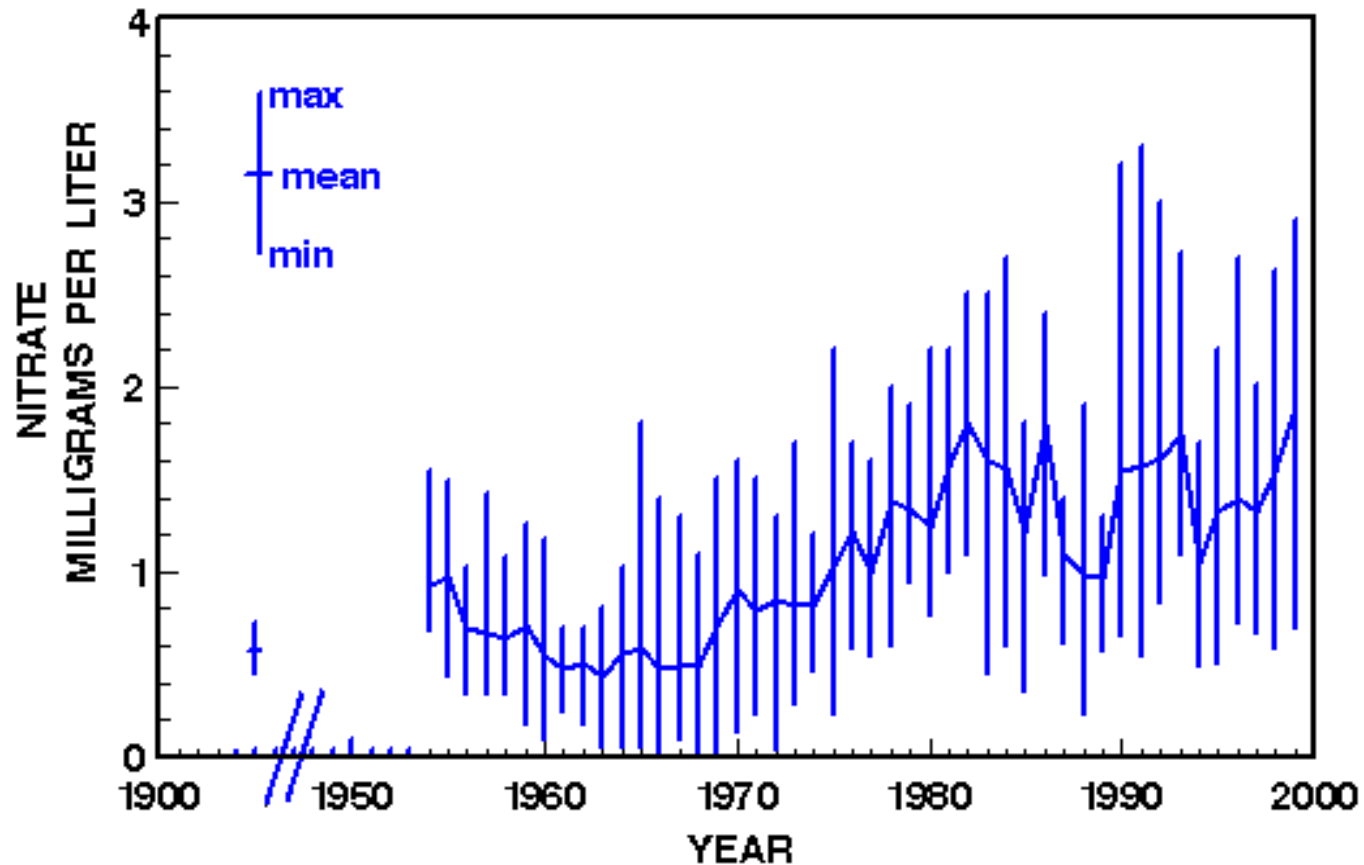
Source: N.N. Rabalais, Louisiana Universities Marine Consortium, Chauvin, La.



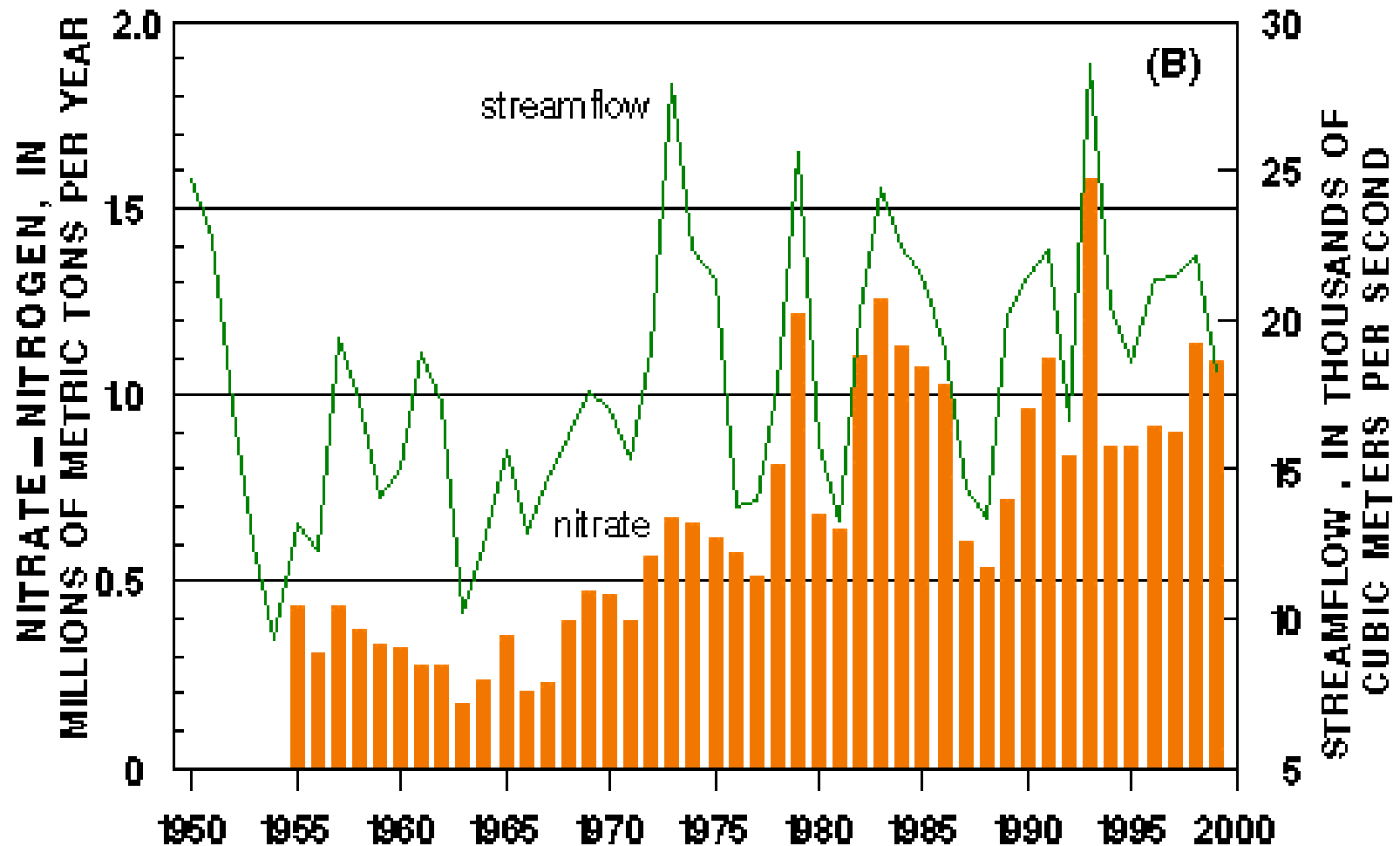
Average annual nitrate concentrations in the Mississippi River Basin in 1905-07 and in 1980-98



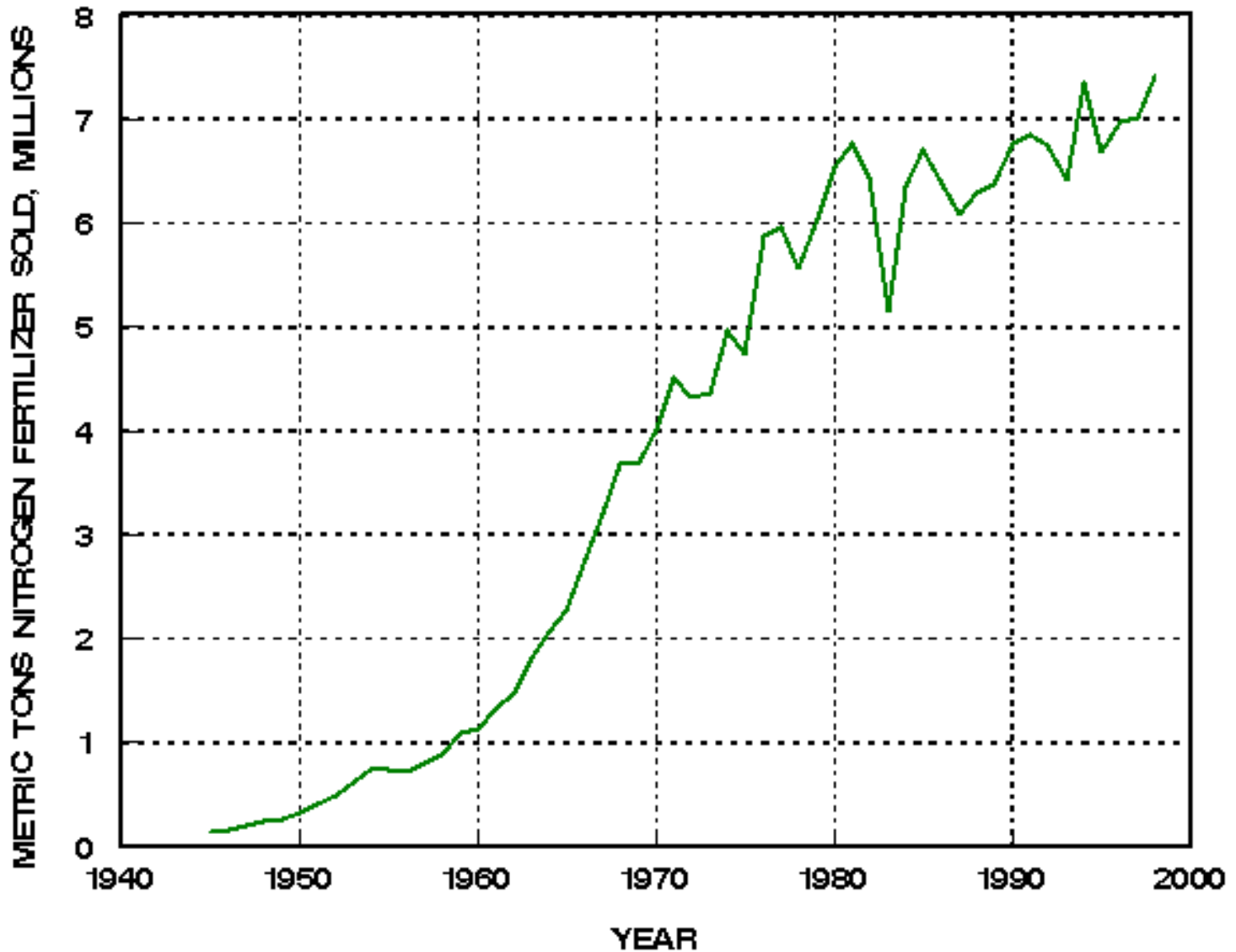
NITRATE CONCENTRATION IN LOWER MISSISSIPPI RIVER, 1955-1999



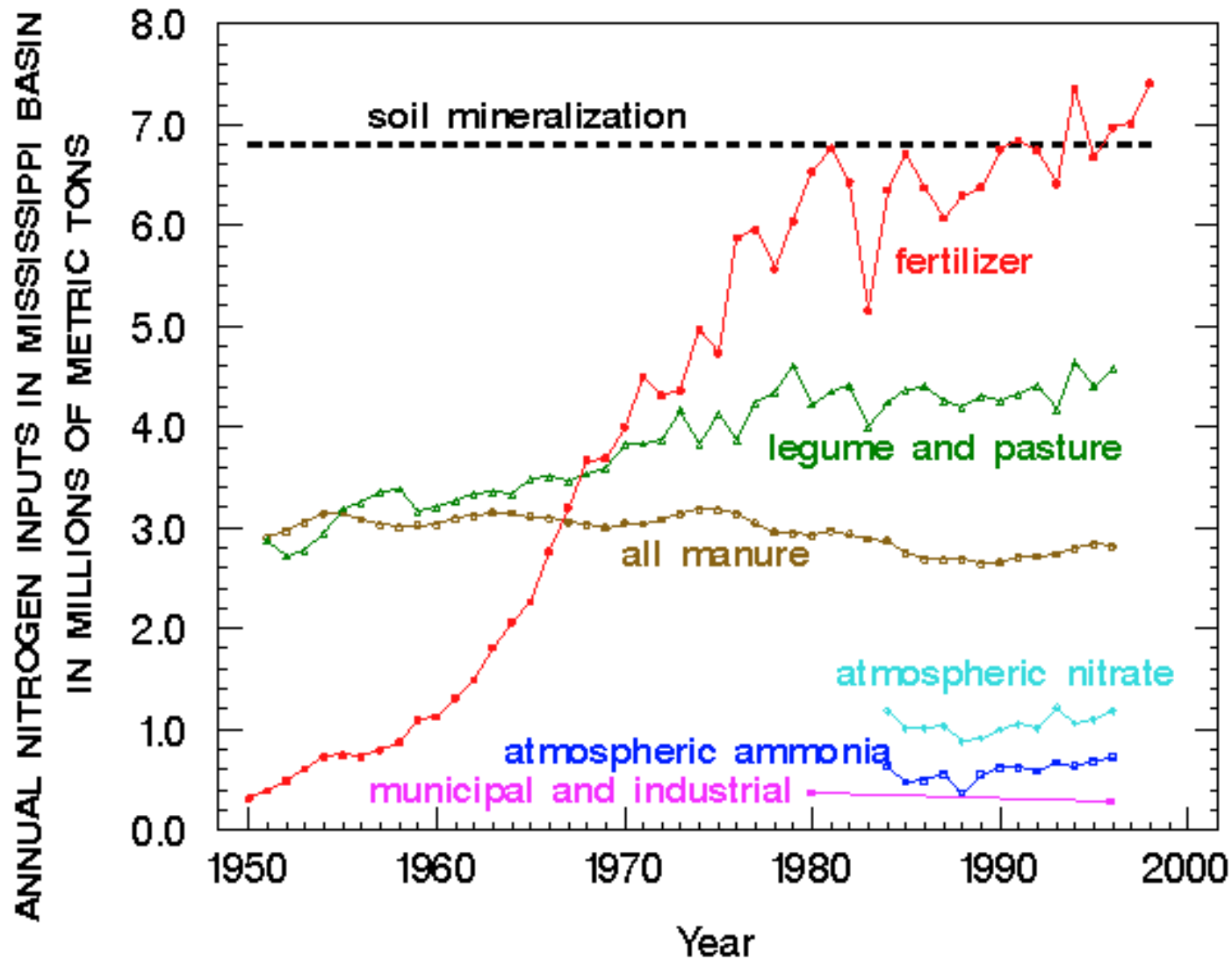
ANNUAL NITRATE FLUX TO GULF OF MEXICO AND MEAN ANNUAL STREAMFLOW

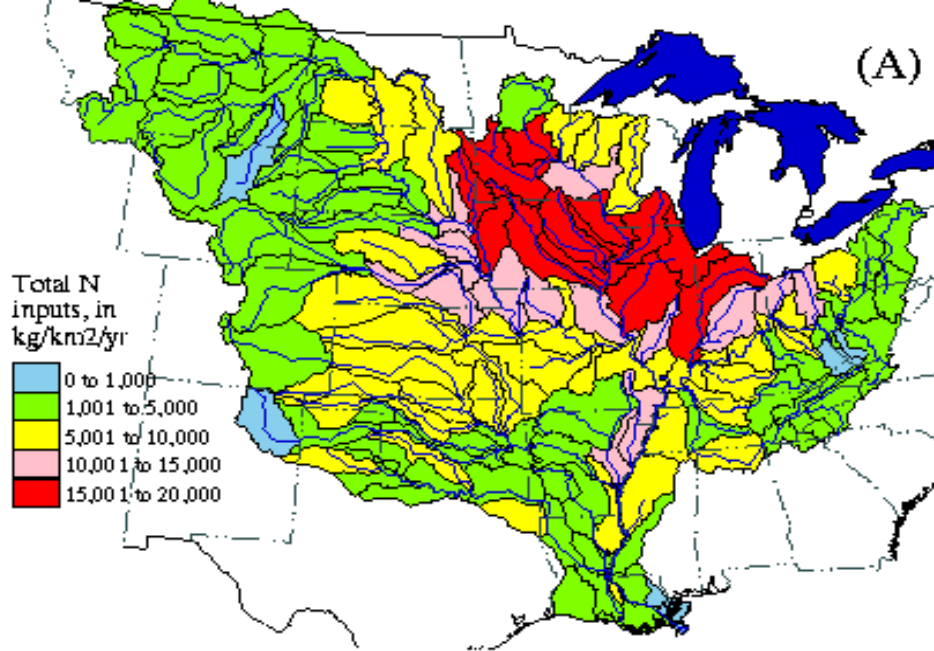


NITROGEN FERTILIZER USE IN THE MISSISSIPPI RIVER BASIN



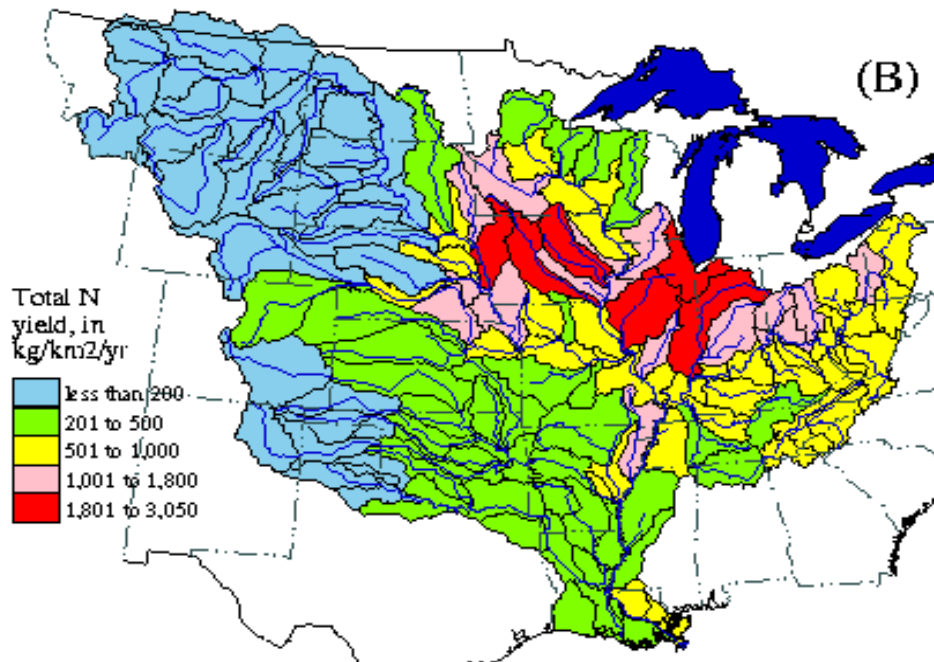
NITROGEN INPUTS TO THE MISSISSIPPI RIVER BASIN





(A) Estimated Nitrogen inputs to the Mississippi River Basin, from all sources, in 1992.

(B) Estimated total nitrogen yields of hydrologic accounting units in the Mississippi River Basin (1980-96)



ANNUAL NITRATE FLUX – OBSERVED, AND PREDICED FROM MULTIPLE REGRESSION MODEL

